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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,903

12/23/2004

Norihide Saho

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ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

REIFSNYDER, DAVID A

ART UNIT

PAPER NUMBER

1723

MAIL DATE

DELIVERY MODE

09/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,903

Applicant(s)

SAHO ET AL.

Examiner

David A. Reifsnyder

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1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/23/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 12/23/2004.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ship must be shown or the ship canceled from claims 9 and 10. Furthermore, the sea-based platform must be shown or the sea-based platform canceled from claim 12. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to because the because the abstract of the disclosure is too long. Correction is required. See MPEP § 608.01(b). The new abstract should be on a separate sheet of paper and have between 50 and 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a flock disintegration means for disintegrating the flocs collected as sludge by use of either an acidic solution or an alkaline solution, the acidic and alkaline solutions being generated by electrolysis of a liquid; however, the specification does not reasonably provide enablement for a floc disintegration means for disintegrating the flocs as collected by sludge by use of an acidic solution/alkaline solution generated by electrolysis of a liquid. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 13; the recitation of “such as plankton, oil particles and organic matter” is vague and indefinite as to what defines “such as”. Furthermore, the recitation of containing pollutant particles, phosphorus and the like”; is vague and indefinite as to defines “and the like”. Lastly, the recitation of “acidic solution/alkaline solution” is vague and indefinite and does not makes sense as to haw a solution can be both acidic and alkaline.

Regarding claims 2, 3 and 6; it is vague and indefinite as to how the instantly claimed “filtration means” is structurally related to the other elements of the purification system. Furthermore, the recitation of “and coagulation and separating means” is vague and indefinite and does not make sense because a coagulation and separating means was already claimed in claim 1. Lastly, the recitation of “containing pollutant particles, phosphorus and the like”; is vague and indefinite as to defines “and the like”.

Regarding claims 4 and 5; the recitation of “said liquid” lacks antecedent basis.

Furthermore, regarding claim 5; it is vague and indefinite as to what is meant by “salt-added soft water”.

Regarding claim 11; the recitation of “floc disintegration means” is vague and indefinite and does not make sense because a “floc disintegration means” was already

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claimed in claim 1. Furthermore, the recitation of acidic solution/alkaline solution" is vague and indefinite and does not makes sense as to how a solution can be both acidic and alkaline. In addition, it is vague and indefinite as to what kind of water is "soft water". Also, while a membrane is used to filter water, it can not be understood as to how a member can be used to treat water.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Saho et al. who discloses a waste water purification apparatus as claimed in claims 1-13. See the entire document, especially Fig. 1 and compare it to Fig. 1 of the instant application. Furthermore, due to the 35 USC 112 1st and 2nd paragraph problems with the instantly claimed flock disintegration means, the flock disintegration means claimed in claim 1 and 13 is given minimal patentable weight. In addition, the fact that the acidic solution/alkaline solution is generated by electrolysis of a liquid fails to add a structural limitation to claims 1 and 13.

Claims 1-13 are rejected under 35 U.S.C. 102(a) as being anticipated by JP 2003-112180 who discloses a waste water purification apparatus as claimed in claims

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1-13. See the entire document, especially Figs. 1-3 and compare them to Figs 1-3 of the instant application. Furthermore, due to the 35 USC 112 1st and 2nd paragraph problems with the instantly claimed flock disintegration means, the flock disintegration means claimed in claim 1 and 13 is given minimal patentable weight. In addition, the fact that the acidic solution/alkaline solution is generated by electrolysis of a liquid fails to add a structural limitation to claims 1 and 13.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Reifsnyder whose telephone number is (571) 272-1145. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


David A Reifsnyder
Primary Examiner
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DAR